

ABSTRACT OF THE DISCLOSURE

The present invention is directed to an exhaust gas recirculation valve incorporating a DC motor and a dual poppet valve assembly. A motor is contained inside of the actuator housing. The motor has a rotatable motor shaft with a first gear connected to the end of the motor shaft. A second gear is engageable to the first gear and is configured to rotate in response to the movement of the first gear and the motor shaft. The second gear is also connected to a pin member disposed through the top portion of a shaft member that has two poppet valves disposed on to the shaft. The two ends of the pin member are slidably engageable to either an upwardly or downwardly sloped ramp portion. When the second gear rotates the shaft rotates and moves upward or downward to cause the valve members to move between an open and closed position.